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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,248	10/20/2006	Gundula Roth	PTGF-03106US	7410
21254 7590 03/04/2010 MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817				
EXAMINER RALEIGH, DONALD L				
ART UNIT 2879		PAPER NUMBER		
MAIL DATE 03/04/2010		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/539,248

**Applicant(s)**

ROTH ET AL.

**Examiner**

DONALD L. RALEIGH

**Art Unit**

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 11-24 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) 4-9 and 19-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 11-18, 26-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)  
Paper No(s)/Mail Date 01/15/2010
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ ~~Notes of Informal Patent Application~~
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

The Amendment, filed on 12/14/2009 has been entered and acknowledged by the Examiner.

**Claims 1-9, 11-24 and 26-31** are pending in the instant application.

**Claims 10 and 25** have been cancelled.

**Claims 4-9 and 19-24** have been withdrawn from consideration.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 01/15/2010 was filed after the mailing date of the office action on 09/14/2009. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### **Claim Rejections - 35 USC § 112**

Applicant's amendment of the claims to eliminate "light emitting component" and "wavelength converting part" overcomes the previous 35 USC 112, 2<sup>nd</sup> paragraph rejection of these limitations. However;

Applicant has not addressed the rejection of the claims under 35 U.S.C. 112, 1<sup>st</sup> paragraph by identifying all of the contents of the claimed mixture, i.e. first phosphor, second phosphor, etc. as suggested in the office action of 09/14/2009. Therefore, the

rejections of these claims still stand and no search can be conducted until this is corrected.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 1-3, 11-18 and 26-31** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The independent **Claims 1, 14-16**, in light of the disclosure, do not enable one to determine which components are present in the combinations and thereby to construct or use the proposed invention.

**Claims 2-3, 11-13, 17-18 and 26-31** are rejected because of their dependency.

For example, examining the claims, the following discrepancies are obvious:

- 1). The word "and" is absent after "fluoroantimonate" in the second paragraph which would connect this limitation to the rest of the phosphor mixture.
- 2). The sixth paragraph refers to "the phosphor mixture". However, the first paragraph refers to "a phosphor mixture" and paragraph 5 refers to "a mixture of eight or less

phosphors". It is not clear which phosphor mixture, the sixth paragraph refers to and no assumption can be made.

3). Regarding the "phosphor mixture" in paragraph six: It is not clear if this phosphor mixture is a mixture independent of the preceding mixtures or whether the sixth paragraph is simply a restatement of additional limitations imposed on one or more of the preceding phosphors.

4). Regarding the limitation "borate-silicate-phosphate" limitation and the accompanying term in parenthesis (B,Si,P); it is not clear if all three, or only one of these elements is required to satisfy the claim. The hyphenated "borate-silicate-phosphate" limitation suggests that all three are required but the comma delimited "(B,Si,P)" limitation suggests that only one is required. Clarification is needed.

The format of the claims is improper. Paragraphs 3, 4 and 7 are in "Markush" format ("selected from the group consisting of"). The remainder of the paragraphs are not in this format. The repeated use of the word "or" makes the claimed content of the "phosphor mixture" unclear.

For the possibility of allowability, it is absolutely essential that the elements of the groups be identified as first, second, third, etc. phosphors and the contents of each group must be specified. Reiterating the suggestions of the office action of 9/14/2009, possible suggestions for the format of these claims are as follows:

A phosphor mixture consisting of:

a first phosphor selected from the group consisting of: (A,B,C.....) and

a second phosphor selected from the group consisting of: (A,B,C.....) **and**  
a third phosphor selected from the group consisting of: (A,B,C.....) **and**  
a fourth phosphor having the general formula:.....

Also, "comprising" may be substituted for "consisting of" in the first line above.

Examiner Notes that an attempt was made to partially put **Claim 15** in the proper format. However, the "and" is still missing after the first phosphor limitation which would link it to the phosphor mixture following. In the following paragraph of Claim 15, the second phosphor is worded "component second phosphor". It is not clear how the word "component" relates to a second phosphor or to the first phosphor. Is it a component of one of the other phosphors? Also, the borate-silicate-phosphate confusion remains in this claim. Is the "borate-silicate-phosphate" a fourth phosphor or simply an additional limitation imposed upon one or more of the first, second and third phosphors? Why wasn't the limitation "fourth phosphor" used when it was used for the first three? Finally, some of the paragraphs use Markush terminology "selected from a group consisting of" and some do not. Also, **Claim 15** indicates that the phosphor mixture comprises the first thru third phosphors but the optical device comprises the "borate-silicate-phosphate" phosphor. This seems to indicate that it is not part of the "phosphor mixture" and could be somewhere else in the device. This is not consistent with **Claim 1** which indicates that it is part of the mixture.

The present state of the claims does not enable a reasonable search to be completed and certainly would not be allowable in this format. It is suggested that a preliminary draft of the revised claims is submitted to the Examiner before sending through the amendment.

### ***Response to Arguments***

Applicant's arguments filed 12/14/2009 have been fully considered but they are not persuasive. The rejection of the claims under 35 U.S.C. 112 1<sup>st</sup> paragraph have not been properly addressed. Consequently, the response is incomplete and therefore:

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DONALD L. RALEIGH whose telephone number is (571)270-3407. The examiner can normally be reached on Monday-Friday 7:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Donald L Raleigh/  
Examiner, Art Unit 2879

/Peter J Macchiarolo/  
Primary Examiner, Art Unit 2879